



# INDEXA

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A 501(c)(3) non-profit organization for the enhancement of amateur radio, worldwide peace, and friendship

## INDEXA

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**T**he idea about a DXpedition to Iran was born in 2011 when I met with Natig, 4J5T, in Azerbaijan. He was fluent in Farsi Language and we thought it would help us organize and carry out the Dxpedition. The situation changed when Natig became very ill and he had to go to the United States for treatment. Sadly, Natig passed away in 2015 and never had the chance to see EP2A.

In 2015 we got outrun by EP6T. However, I didn't give up on this idea and later that year after correspondence with Mohammad,

EP2LMA, and with the cooperation with Latvian-Iran friendship association I visited Iran for the first time where I met with Mohammad Mobini, EP3MIR, and Mohammad Azimi, EP2LMA, and we agreed on organizing a common DXpedition.

### THE PLANNING PROCESS

After analyzing EP6T cited problem areas, we decided to look for a location outside highly populated and industrialized areas. Mohammad, EP3MIR, was responsible for acquiring necessary permits from CRA and government institutions. My responsibility was to complete the equipment acquisition and the team.



**Yuris YL2GM and Natig 4JST (now SK) in Azerbaijan , 2011.**

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# Iran 2016—EP2A (Con'd)

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## THE TEAM

I encountered my first difficulties when I started to assemble the team. I called my friends, but most everyone I called had to decline participation for various reasons so I posted my needs on contest.ru forum where I met Alex (UX0LL)—a radio amateur from Ukraine. He helped to find three other team members that allowed me to complete the Ukrainian part of the team. Later for personal reasons, two members of our assembled team had to call off their participation. From that point on, we were an eight man team that didn't change—3 Latvians, 3 Ukrainians, and 2 Iranians.



The team—Oleg (US7UX), Dmitry (UT7UJ), Sasha (UT7UV), Mohammad (EP2LMA), Yuris (YL2GM), Valery (YL2CW), Mohammad (EP2MIR), and Jack (YL2KA).

Operating licenses in Iran are issued individually and to receive them we had to send individual applications with additional information. Not everything went as planned. After collecting all necessary information, the documents were sent to Iran via Latvian Post Office in one package, but the package was lost during transit, and it took a month or so for us to find this out. We had to collect the information again, and that took time as well. However, the documents were dispatched once more, this time using different post service and it was delivered to the recipient safely. This was one of the reasons that the DXpedition starting date got postponed by eight months. However, the good news was that we all received licenses and on top of that we were granted our desired callsign—EP2A.

During the whole DXpedition our team was supported from home. From Latvia by Agris YL2VW, Ziedonis YI2GN, and Kaspars; from USA by Herbert K7GEX.

## EQUIPMENT AND ANTENNAS

I contacted Andrey RA6LBS and he helped us by providing the expedition with six “Perfo Box-1500” band pass filters and two antenna four-square switch relay units. More detailed information about this equipment can be found on his website <http://lowbandsystems.com>.

Regarding power amplifiers, I talked to Martti OH2BH and he suggested I investigate Expert am-

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# Iran 2016—EP2A (Con'd)

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plifiers with antenna tuning. Then, after writing a personal message to Gianfranco I0ZY, his company, SPE, manufactured two Expert 1.3K-FA amplifiers especially designed for EP2A and we received them just one week before the DXpedition starting date. A third amplifier (homemade) was provided by Eugene EA5HPX.

As for transceivers, we used two Elecraft K3s (mine and YL2KL's) and one TS-590 from UT7UJ.

Jack YL2KA and I constructed our antennas and together we tested them in a field next to my home. Altogether we completed seven antennas—two 5-band Spiderbeams, two four-square arrays (30m and 40m), one 160m/80m vertical and two receive-only antennas from Hi-Z. For the 160/80m, 40m, and 30m antennas we used fiberglass poles from Spiderbeam. More information on these products can be found on the websites for Spiderbeam and Hi-Z.

Once we had all our equipment together, we dealt with the matter of getting it delivered to Iran and expedited through the customs. ATA Carnet Services made our lives easier by completing the “heavy lifting” in taking care of this aspect of our operation.

## TRAVELING

Tickets for trip Riga—Kiev—Tehran were ordered in advance and we had no problems with this.

It was Saturday morning 3AM when I finished packing my bags. After a three-hour nap and a quick breakfast I was on the way to Riga airport where I met with Larry and Jack. From Riga we flew to Kiev where we met our Ukrainian friends in person for the first time. In Tehran we landed after midnight where we were greeted by local radio amateur friends and expedition members EP3MIR and EP2LMA with this amazing poster shown on the next page. After couple of hours dealing with custom formalities we were on the 420km trip to Gilan province—our DXpedition location.

## SETTING UP DX POSITIONS

Day 1: After a quick survey of surroundings, we began setup of our first Spiderbeam antenna in the

(Continued on page 4)



Perfo Box 1500 bandpass filters and Four-square relay switch units by RA6LBS.



Expert 1.3k-FA power amplifiers by I0ZY.



Spiderbeam under assembly by our “shack”.

# Iran 2016—EP2A (Con'd)



After a long day of travel, a wonderful welcome awaited us after midnight in the Tehran airport by Iranian Amateur Radio friends and our two Iranian teammates.

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yard. The first QSO took place on 15 April at 15:09 local time. Later the same day, we completed setup of the 30m four-square antenna, and the second station was operational.

After a couple of hours of operating, our plans were interfered with by a local neighbor who, with the help of an axe, started taking down our 30m four-square antenna. Local radio amateurs negotiated and with the assistance of the police, the problem was solved.

Day 2: The second Spiderbeam and 40m four-square antennas were assembled and operational by noon. Soon thereafter, another neighbor arrived with complaints about electricity usage. After presenting papers and a friendly chat, the problem is resolved. The third operator's position is operational.

The rest of the day was spent setting up the 160m/80m vertical antenna. We were having some problems with noise levels (59+10db) and it was

practically impossible to hear any signals. It turned out to be a power supply unit fault and after changing two of them the noise levels went down.

Day 3: We finish setting up all antennas. Computers were connected using WI-FI but the connections were intermittent which required frequent restarting of the network. To solve this problem we resorted to good old-fashioned wire connections.

The four-square antennas on 30m and 40m with the relay unit from RA6LBS worked as perfect combinations. Likewise for the 160m/80m transmitting antennas, also a RA6LBS design. Both Spiderbeams were set up in the yard next to the house, very close to each other. Unfortunately this was because of space limitations. It resulted in some minor inter-station interference between them, but other than that, they worked well.

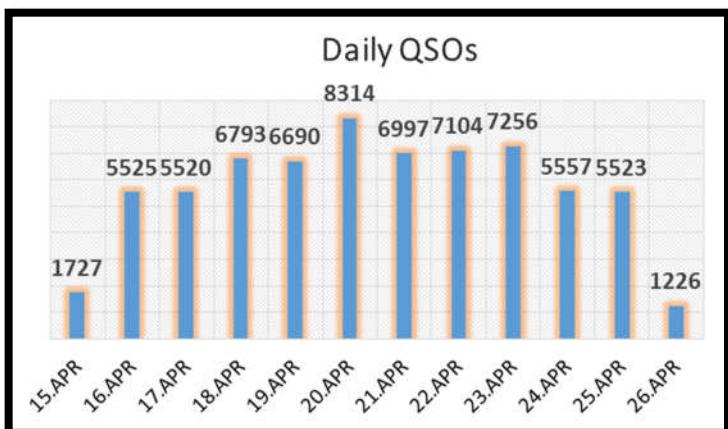
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# Iran 2016—EP2A (Con'd)

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## RESULTS AND STATISTICS

We set two goals for our venture. One goal was that we surpass the QSO count of EP6T which had been able to activate Iran in 2015. The second goal was to make more QSOs with North America than had been done earlier. We were most pleased when we achieved both of our goals. Displayed below are the statistics which quantify our efforts.



**Continent by Mode**

Band	PH	CW	RTTY	Total	Total %
AF	126	144	12	282	0.4%
AN	0	1	0	1	0.0%
AS	2813	8203	1080	12096	17.7%
EU	14745	28531	2901	46177	67.7%
NA	1880	6452	445	8777	12.9%
OC	118	242	33	393	0.6%
SA	164	319	23	506	0.7%
<b>Totals</b>	<b>19846</b>	<b>43892</b>	<b>4494</b>	<b>68232</b>	

**Band/Mode breakdown**

Band	PH	CW	RTTY	Total	Total %
160	2	1765	0	1767	2.6%
80	42	2007	0	2049	3.0%
40	2522	5593	310	8425	12.3%
30	0	9209	2527	11736	17.2%
20	8207	10694	796	19697	28.9%
17	4565	6833	334	11732	17.2%
15	4137	5796	527	10460	15.3%
12	223	1116	0	1339	2.0%
10	148	879	0	1027	1.5%
<b>Totals</b>	<b>19846</b>	<b>43892</b>	<b>4494</b>	<b>68232</b>	

**DXCC by Band/Mode breakdown**

Column1	PH	CW	RTTY	Total
160	1	66	0	66
80	17	73	0	73
40	80	105	42	111
30	0	112	77	115
20	109	114	59	125
17	90	103	28	109
15	97	105	49	119
12	25	66	0	69
10	24	53	0	58
<b>Totals</b>	<b>127</b>	<b>133</b>	<b>84</b>	<b>151</b>

**Continent by Band**

Band	160	80	40	30	20	17	15	12	10	Total	Total %
AF	1	7	23	37	65	54	71	12	12	282	0.4%
AN	0	0	0	0	0	1	0	0	0	1	0.0%
AS	141	125	910	1810	2517	2997	2929	488	179	12096	17.7%
EU	1610	1782	6048	7372	13188	7480	7080	809	808	46177	67.7%
NA	9	122	1314	2379	3696	1105	152	0	0	8777	12.9%
OC	1	0	20	54	144	54	90	22	8	393	0.6%
SA	5	13	110	84	87	41	138	8	20	506	0.7%
<b>Totals</b>	<b>1767</b>	<b>2049</b>	<b>8425</b>	<b>11736</b>	<b>19697</b>	<b>11732</b>	<b>10460</b>	<b>1339</b>	<b>1027</b>	<b>68232</b>	

# Iran 2016—EP2A (Con'd)

## EXPERIENCE GAINED FROM DXPEDITION

Experience is the best teacher. We learned that it is important to have more powerful computers. Moreover, it is mandatory to connect and test the network capability before the DXpedition in order to avoid the networking problems we experienced.

We also will plan to switch logging software from N1MM to Wintest or a similar software suite. We found N1MM took too much time to make call corrections and it doesn't support DXpedition recording features.

In regards to our transceivers, we decided we prefer the K3, but we intend to look at the SDR IC-7300 as an alternative for comparison. We will definitely use the Expert 1.3k linears if available for our next DXpedition. They proved to be very good, very reliable power amplifiers.

## EP2A QSL CARD IMAGE (We hope we were able to send you one!)



## THANK YOU!

As one who was present when the notion of activating Iran was just a seed of an idea, I wish to thank the team members, their families, and the support teams who came together to provide the physical and moral support to allow us to activate Iran. Thanks also to the clubs, associations, and individual radio amateurs who provided financial support to help us complete our mission. Finally, thanks to those who tried to contact us and for those who did contact us. Without you, there would be little reason to have a DXpedition.



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